AMENDMENTS TO CLAIM

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

Claims 1-79 (Cancelled).

80. (Currently Amended) A method of differentiating progenitor cells *in vitro* to produce a cell population containing neuronal cells protected from apoptotic cell death, comprising the steps of:

(a) contacting *in vitro* said progenitor cells with a differentiating agent; and

(b) introducing *in vitro* into said progenitor cells a nucleic acid molecule encoding a constitutively active MEF2 polypeptide or an active fragment thereof,

thereby differentiating said progenitor cells *in vitro* to produce a cell population containing neuronal cells protected from apoptotic cell death.

81. (Previously presented) The method of claim 80, wherein said MEF2 polypeptide is human MEF2C, or an active fragment thereof.

82. (Previously presented) The method of claim 80, wherein said constitutively active MEF2 polypeptide is a MEF2/VP16 fusion protein.

83. (Previously presented) The method of claim 80, wherein said constitutively active MEF2 polypeptide contains one or more serine/threonine to aspartic acid/glutamic acid substitutions in the MEF2 transactivation domain.

84. (Previously presented) The method of claim 80, further comprising inhibiting caspase activity in said progenitor cells.

85. (Previously presented) The method of claim 80, wherein said progenitor cells are human stem cells.

86. (Previously presented) The method of claim 80, wherein said progenitor cells are embryonic stem cells.

87. (Previously presented) The method of claim 86, wherein said embryonic stem cells are human embryonic stem cells.

88. (Previously presented) The method of claim 80, wherein said progenitor cells are hematopoietic progenitor cells.

89. (Previously presented) The method of claim 88, wherein said hematopoietic progenitor cells are human hematopoietic progenitor cells.

90. (Previously presented) The method of claim 80, further comprising selecting CD133-positive human progenitor cells.

91. (Previously presented) The method of claim 80, further comprising selecting CD133-positive/CD34-positive human progenitor cells.

92. (Previously presented) The method of claim 80, further comprising selecting CD133-positive/CD34-negative human progenitor cells.

93. (Previously presented) The method of claim 80, further comprising selecting CD133-positive/CD34-negative/CD45-negative human progenitor cells.

94. (Previously presented) The method of claim 80, further comprising selecting CD34-negative/CD38-negative/Lin-negative human progenitor cells.

95. (Previously presented) The method of claim 80, further comprising selecting CD34-positive/CD38-negative/Lin-negative/ Thy-1-negative human progenitor cells.

96. (Previously presented) The method of claim 80, wherein said differentiating agent is retinoic acid.

97. (Previously presented) The method of claim 80, wherein said differentiating agent is selected from the group consisting of neurotrophic factor 3, epidermal growth factor, insulin-like growth factor 1 and a platelet-derived growth factor.

98. (Previously presented) The method of claim 80, wherein said population containing protected neuronal cells comprises at least 50% neuronal cells.

99. (Previously presented) The method of claim 80, wherein said nucleic acid molecule is stably introduced into said progenitor cells.